

ATTACHMENT A
CLEAN COPY OF AMENDED AND NEW CLAIMS

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1. A nucleic acid encoding a peptide having the biological activity of sorbin, said nucleic acid comprising the nucleotide sequence selected from:

- a) the sequence SEQ ID No. 1;
- b) the sequence SEQ ID No. 3;
- 10 c) the sequence SEQ ID No. 5;
- d) a nucleotide sequence homologous to the sequence SEQ ID No. 1, No. 3 or No. 5; and
- e) at least one nucleotide fragment of said sequence a), b), c) or d).

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2. The nucleic acid as claimed in claim 1, said nucleic acid comprising a nucleotide sequence selected from the sequence SEQ ID No. 6 to 8 and a nucleotide sequence homologous to the sequence SEQ ID No. 6 to 8.

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3. (Amended) A cloning and/or expression vector comprising a nucleotide sequence as defined in claim 1.

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4. A host cell transformed with the vector as claimed in claim 3.

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5. (Amended) A method for producing recombinant peptide

having the biological activity of sorbin, said method comprising the steps consisting in:

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- i) inserting a nucleotide sequence as defined in claim 1 into an expression vector, said nucleotide sequence being functionally linked with elements which allow the regulation of its expression;
 - ii) transforming a host cell with the vector thus obtained;
 - iii) culturing said host cell under conditions which allow the expression of said nucleotide sequence;
 - 10 iv) recovering the recombinant peptide expressed;
 - v) optionally purifying said peptide;
 - vi) optionally carrying out an amidation of the peptide produced.

6. An isolated recombinant peptide obtained using the method

15 as claimed in claim 5.

7. A recombinant peptide having the biological activity of sorbin and comprising the amino acid sequence selected from the sequences SEQ ID No. 2, SEQ ID No. 4 and SEQ ID No. 11.

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8. (Amended) A pharmaceutical composition comprising a nucleic acid as claimed in claim 1.

9. An oligonucleotide comprising the sequences SEQ ID No. 12

25 to SEQ ID No. 20 or the sequences complementary thereto.

10. A method for detecting the expression of sorbin in a cell or tissue sample, comprising the steps consisting in:

- preparing the RNA of said sample;
- bringing said RNA obtained into contact with a probe having a nucleotide sequence capable of hybridizing specifically with a nucleic acid encoding a peptide having the biological activity of sorbin, as defined in claim 1;
- detecting the presence of mRNA which hybridizes with this probe, indicating the expression of a peptide having the biological activity of sorbin in the sample.

11. A method for detecting the expression of sorbin in cells or a tissue by *in situ* hybridization, comprising the steps consisting in:

- bringing said cells or said tissue into contact with a probe having a nucleotide sequence capable of hybridizing specifically with a nucleic acid encoding a peptide having the biological activity of sorbin, as defined in claim 1;
- detecting the presence of mRNA which hybridizes with this probe, indicating the expression of the peptide having the biological activity of sorbin.

12. A monoclonal or polyclonal antibody directed specifically against human sorbin, or a fragment of said antibody capable of binding specifically to human sorbin.

13. A method for detecting and/or immunosaying human

sorbin in a biological sample, in which:

i) said biological sample is brought into contact with an antibody
as defined in claim 12, labeled in a detectable manner;

5 ii) the formation of an antibody-human sorbin complex,
indicating the presence of human sorbin in said sample, is observed.

14. (New) A pharmaceutical composition comprising a peptide

as claimed in claim 6.

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15. (New) A pharmaceutical composition comprising a peptide

as claimed in claim 7.

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